We claim:

    1. A method of troubleshooting software hangs on a computing device, the method comprising:

5   capturing data associated with a hang;

        extracting attributes associated with the hang; and

        comparing the extracted attributes to a database of issues to troubleshoot the hang.

    2. The method of claim 1 further comprising:

10   packaging the captured data into a file; and

        assigning the packaged file an identification value for tracking the hang.

    3. The method of claim 2 wherein the identification value comprises a hash value associated with a call stack.

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    4. The method of claim 1, wherein comparing the extracted attributes further comprises:

        identifying the hang; and

        providing a user with a solution to the hang, if the solution is available.

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    5. The method of claim 1, wherein capturing data associated with a hang further comprises extending a schema by using a data capture program extension.

    6. The method of claim 1, wherein extracting attributes to diagnose the hang

25   further comprises extending an attribute extraction schema through the use of an attribute plugin.

    7. The method claim 1, wherein the database of issues comprises data to represent at least one hang event.

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    8. The method of claim 1, further comprising

performing on the computing device the comparison of extracted attributes to the

database of issues;

assigning the extracted attributes a value based on a history of hang events;

determining a potential culprit for the hang event based on the assigned values;

5   performing troubleshooting steps to quarantine the potential culprit.

9.   The method of claim 8, wherein the potential culprit comprises one of a file,

module, process, thread, block of code, instruction, or the like.

10   10. The method of claim 8, wherein performing troubleshooting steps to

quarantine the potential culprit comprises renaming a file.

11. The method of claim 8, further comprising updating the history of hang

events.

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12. A system for troubleshooting software hangs comprising:

a data capture program to capture data associated with a hang on a computing

device;

a diagnostic data file to save the captured data associated with the hang;

20   a packaged file to wrap up the diagnostic data file with at least an identification

value to identify the hang;

a packaged file repository operating to receive the packaged file;

a datamining utility operating to extract an attribute from the packaged file into a

first attribute structure; and

25   a bucket database operating to maintain a second attribute structure and to

generate a value based on a comparison of the first attribute structure to the second

attribute structure.

13. The system of claim 12, wherein the value of the comparison of the first

30   attribute structure to the second attribute structure comprises a known value.

14. The system of claim 13, wherein the known value is a solution to the hang.

15. The system of claim 12, wherein the data capture program comprises Watson technologies.

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16. The system of claim 12, wherein the datamining utility comprises a component of the computing device.

17. A method of operating a diagnostic data file from a client computing device,

10   comprising:

    upon the occurrence of a hang event associated with a program at the client computing device, initiating a capture event to collect data associated with the hang event;

    making a data image of the collected data from the capture event;

15   mining the data image to extract attributes of the hang event; and

    structuring the extracted attributes to a format usable by an analysis tool.

18. The method of claim 17, wherein structuring the extracted attributes to a format usable by an analysis tool comprises generating a decision tree.

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19. The method of claim 17, wherein the data image of the collected data comprises a mini-dump.

20. The method of claim 17, further comprising analyzing the extracted attributes

25   to determine whether the extracted attributes identify a known bug:

    if so, providing a solution to solve the hang event;

    else, if the extracted attributes do not identify a known bug:

        sending the data image of the collected data to be diagnosed;

        upon discovery of a cause of the hang event, fixing the cause of the hang

30   event; and

        updating the analysis tool to look for the cause of the hang event.